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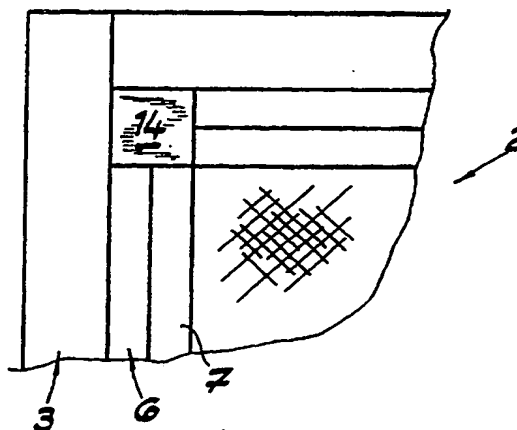
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⑤4 **Shower Cabinet with Shower Plate**

⑤7 A shower cabinet with: a shower-plate, shower-cabinet walls connected to the edge of the shower-plate, and a shower-cabinet door. The shower-plate has a standing-area, and also has a shower-water draining-channel which runs around the edge region of the shower-plate, adjoins the standing-area by way of a slope, and has — at the wall sides of the shower-cabinet — an outer wall cum outer edge. The standing-area is higher than the draining-channel, and slopes from the centre towards the draining-channel. The shower-cabinet walls are seated upon the outer edge of the draining-channel, at the wall sides of the cabinet. The shower-cabinet door's lower edge, when viewed from the standing-area, is situated in front of the slope of the draining-channel. The arrangements are such that the shower-water running down off the shower-cabinet walls runs into the draining-channel; and the shower-water running down off the closed shower-cabinet door passes through the gap under the lower edge of the shower-cabinet door and into the draining-channel, which acts as a water collecting channel for the shower door.



The following data have been taken from the documents filed by the Applicant

Description

The invention relates to a shower-cabinet with a shower-plate, shower-cabinet
5 walls which belong to the building and which are connected to the edge of the
shower-plate, and a shower-cabinet door, wherein the shower-plate has a standing
area, and also has a shower-water draining-channel surrounding the edge of the
shower-plate. In addition to walls forming part of the [building], partitioning-walls
can also be connected to the shower-plate. "Standing-area" means the surface that
10 persons using the shower-cabinet stand on.

In the form of embodiment of the above-described shower cabinet that is known in
practice, from which the invention starts out, the standing-area is generally lower
than the edge of the shower-plate. At the wall sides of the shower-cabinet, the
shower-cabinet walls are generally seated upon the outer edge of the draining-
15 channel, with a sealant interposed between said walls and said edge. The same is
true of partitioning-walls, when these are provided. These sealing measures are
unsatisfactorily expensive, and are open to criticism as to how long they last,
particularly as, depending on the material used, the possibility of the sealant being
attacked by bacteria cannot be excluded — which is harmful as regards hygiene.
20 The draining-channel also runs in the region of the shower-cabinet door, i.e. in
front of the door when viewed from the standing-area. Water can escape
uncontrolled, under the door, and cause trouble by getting into the bathroom. It is
difficult to arrange sealing-elements in this region.

The technical problem to be solved by the invention is how to design a shower-
25 cabinet with a shower-plate, attached walls, and an attached door, so that shower-
water can no longer get out under the shower-cabinet wall [sic]; and so that in
addition, in a preferred form of embodiment, special sealing-means are no longer
required in the region between the outer edge of the shower-plate and the
respective shower-cabinet wall.

30 To solve this problem, the subject-matter of the invention is a shower-cabinet
with a shower-plate, shower-cabinet walls belonging to the building that are

connected to the edge of the shower-plate, and a shower-cabinet door, with the following features:

- 1.1) the shower-plate has: a standing-area; a shower-water draining-channel running around the edge region of the shower-plate and adjoining the standing-area by way of a slope; and, at the wall sides of the shower-cabinet, an outer wall cum outer edge;
- 1.2) the standing-area is higher than the draining-channel;
- 1.3) the shower-cabinet walls are seated upon the outer edge of the draining-channel, at the wall sides of the shower-cabinet; and
- 1.4) the shower-cabinet door's lower edge is situated above the slope of the draining-channel, leaving a gap free;

and the arrangements are such that the shower-water running down off the shower-cabinet walls runs into the draining-channel, and the shower-water running down off the closed shower-cabinet door can pass through the gap under the lower edge of the shower-cabinet door and into the draining-channel, which acts as a water collecting channel for the shower door. Of course the draining-channel has an outflow-connection, and the draining-channel slopes towards the outer edge. Moreover, the dimensions of the draining-channel are such as to ensure that the shower-water will drain away under all possible shower-cabinet operating conditions. According to the invention, the shower-cabinet wall belonging to the building can consist of a number of layers, e.g. a masonry wall as the first layer, an insulating layer, and tiling as the third layer. In this case, the shower-plate can stand, so to speak, in front of the masonry wall, while only the layers applied to the masonry wall stand upon the outside-edge of the draining-channel at the wall side of cabinet. In a preferred form of embodiment of the invention, the standing-area slopes towards the draining-channel.

The invention starts out from the known fact that, in the case of a shower-cabinet with a shower-plate, it is possible to arrange things so that shower-water can no longer get out under the shower door, but can only get into the draining-channel, which, when viewed from the bathroom, is arranged in front of and below the lower edge of the shower-cabinet door, but has, however, the slope mentioned in claim. Said slope can be designed as an inclined plane, or can have a concave or convex cross-section. The teaching of the present invention can be implemented with a great variety of shower-cabinet doors, particularly *sliding-doors*, which are

slid more or less parallel to the axis of the draining-channel, but also *folding-doors*, which open outwards in this invention. Partitioning-walls are also used in the present invention, and can be arranged in the same way as described for the shower door, i.e. with a gap under the lower edge of the partitioning-wall or walls, through which the shower-water can run off into the draining-channel. This also applies to mounted components arranged on one or both sides of the shower-door. The partitioning-wall or walls can, however, also be arranged in the manner described with regard to the shower-cabinet walls on the building side of the cabinet. The standing-area of the shower-plate can have an anti-slip layer or anti-slip roughening.

More specifically, there are a number of possibilities for further developments and configurations within the scope of the present invention. For example, there is a preferred form of embodiment of the invention in which the outer edge of the draining-channel is lower, at the wall-sides of the cabinet, than the standing-area is, and likewise the outer edge of the draining-channel at the door side of the cabinet is also lower. The draining-channel is, advantageously, covered by a grate, at least in the region of the shower door. However, such a grate can also be provided more or less all the way around.

According to the invention, the partitioning-walls can be prefabricated parts made of glass or similar materials, e.g. transparent plastic. It will be appreciated that that it is possible to use frames, structural sections, or posts when erecting the walls. If prefabricated partitioning-walls are used, then according to the invention the draining-channel will be spanned by cross-pieces or corner-plates, upon which will be placed shower-cabinet wall parts and/or door-related components, e.g. the door frame, door mouldings, or door posts.

With regard to dimensions, there are a number of possibilities according to the invention. This applies also to the height of the shower-plate. Good results have been obtained with a form of embodiment in which the height of the shower-plate, from the bottom of shower-plate to the standing-area, is about 40 to 70 mm, and preferably about 55 mm. The outside edge of the draining-channel at the wall sides of the shower-cabinet, and the upper edge of the draining-channel at the door side of the cabinet can always be lower than the standing-area. The draining-channel can be covered with a grate, either just in the region of the door or all the way around.

With regard to the shower-cabinet walls that belong to the building, the invention also teaches that the shower-cabinet's inside walls have a cladding on them, e.g. tiles, or moulding-flanges, projecting into the draining-channel. The masonry or cladding are suitably constructed and installed. In order to mount partitioning-walls and/or the shower-cabinet door in a simple manner, it is recommended,
5 according to the invention, that the draining-channel should be spanned by cross-pieces or corner-plates, upon which the partitioning-wall parts and/or components for the shower-cabinet door, e.g. door mouldings, door posts, or a door frame are placed. Good results have been obtained, as regards the shower-water collection
10 and drainage functions, with a form of embodiment in which the depth of the draining-channel is approximately $2/3$ to $3/4$ the height of the standing-area. The height of the outer edge of the draining-channel is approximately $2/3$ to $3/4$ the height of the standing-area. Generally, the shower-plate will be in the form of a prefabricated component. All materials normally used for shower-cabinets and
15 bathrooms can be used for the components described.

The invention will now be described in more detail through just one example of an embodiment thereof, making reference to the drawings, in which:

- Figure 1 is a view of a shower cabinet according to the invention, broken off at the top;
- 20 Figure 2 is a view looking down on the subject-matter of Figure 1;
- Figure 3 is on a considerably larger scale than Figures 1 and 2, and shows the subject-matter of Figure 2, sectioned in the direction A-A;
- Figure 4 is on a still larger scale, and shows the subject-matter of Figure 2, sectioned in the direction B-B; and
- 25 Figure 5 shows an enlarged detail of the subject-matter of Figure 2, with "corner-plates".

The shower cabinet 1 shown in the drawings has: a shower-plate 2; shower-cabinet walls 3 which belong to the building and are connected to the edge of the shower-plate 2; and a shower-cabinet door 4.

30 The shower-plate 2 has a standing-area 5, and a shower-water draining-channel 6 running around the edge of the shower-plate 2. The draining-channel 6 is connected to the standing-area 5 by a slope 7 in the form of e.g. an inclined plane, and has — at the wall sides of the shower-cabinet — an outer wall 8 cum outer

edge 9. The standing-area 5 is higher than the draining-channel 6, and is inclined towards the latter. The shower-cabinet walls 3 are seated upon the outer edge 9 of the draining-channel 6. The shower-cabinet door 4 has its lower edge above the slope 7 of the draining-channel 6, which is shown in particular in Figure 4. The arrangements are such that the shower-water running down off the shower-cabinet walls 3 runs into the draining-channel 6, and the shower-water running off the closed shower-cabinet door 4 can pass through a gap 10 under the lower edge of the shower-cabinet door 4 and consequently runs into the draining-channel 6 and can no longer escape uncontrolled. Thus the draining-channel 6 acts as a water collecting channel for the shower-cabinet door 4. No partitioning-wall is shown. If there is one, it can be arranged as indicated in Figure 4, but also as shown in Figure 3. The standing-area 5 of the shower-plate 2 can have an anti-slip coating or anti-slip roughening.

In the embodiment-example and preferred form of embodiment of the invention, the outer edge 9 of the draining-channel 6 is lower than the standing-area 5. The same applies as regards the outer edge 11 of the draining-channel 6 on the door side of the shower-cabinet. It is indicated, in Figure 4, that the draining-channel 6, at least in the region of the shower-cabinet door 4, is covered with a grate 12. Figure 3 shows that the shower-cabinet wall 3, which may be a building-wall, has an interior cladding 13, which could project, as a wall moulding flange, into the draining-channel. In Figure 5, it can be seen that the draining-channel 6 has corner-plates 14 which span the channel's cross-section, and upon which can be seated the shower-cabinet wall parts and/or door-related components, e.g. the frame or door posts.

The depth of the draining-channel 6 is approximately $\frac{2}{3}$ to $\frac{3}{4}$ the height of the standing-area 5. The height of the outer edge 9 of the draining-channel 6 is approximately $\frac{2}{3}$ to $\frac{3}{4}$ the height of the standing-area 5. The shower-plate 2 shown may be a prefabricated component.

Claims

1. A shower cabinet with: a shower-plate, shower-cabinet walls belonging to the building and connected to the edge of the shower-plate, and a shower-cabinet door[; such that:]
 - 5 1.1) the shower-plate has a standing-area, and also has a shower-water draining-channel which runs around the edge region of the shower-plate, adjoins the standing-area by way of a slope, and has — at the wall sides of the shower-cabinet — an outer wall cum outer edge,
 - 1.2) the standing-area is higher than the draining-channel,
 - 10 1.3) the shower-cabinet walls are seated upon the outer edge of the draining-channel, at the wall sides of the shower-cabinet, and
 - 1.4) the shower-cabinet door's lower edge is situated above the slope of the draining-channel, leaving a gap free;wherein the arrangements are such that the shower-water running down off the shower-cabinet walls runs into the draining-channel; and the shower-water running
15 down off the closed shower-cabinet door passes through the gap under the lower edge of the shower-cabinet door and into the draining-channel, which acts as a water collecting channel for the shower door.
2. A shower-cabinet as claimed in claim 1, wherein the standing-area slopes
20 towards the draining-channel.
3. A shower-cabinet as claimed in claim 1 or 2, wherein the outer edge of the draining-channel at the wall sides of the shower-cabinet, and the outer edge of the draining-channel at the door side of the shower-cabinet, are at a lower level than the standing-area.
- 25 4. A shower-cabinet as claimed in any of claims 1 to 3, wherein the draining-channel — at least in the region of the shower-cabinet door — is covered with a grate.
5. A shower-cabinet as claimed in any of claims 1 to 4, wherein the shower-cabinet walls project — by way of a cladding or a moulding-flange — into the
30 draining-channel.

6. A shower-cabinet as claimed in any of claims 1 to 5, wherein the draining-channel has cross-pieces or corner-plates which bridge its cross-section, and upon which the shower-cabinet wall-parts and/or door-related structural components, e.g. door-frame or door posts, are placed.
- 5 7. A shower-cabinet as claimed in any of claims 1 to 6, wherein the height of the shower-plate is approximately 40 to 70 mm, and preferably approximately 55 mm, from the bottom of the shower-plate to the standing-area.
8. A shower-cabinet as claimed in any of claims 1 to 7, wherein the draining-channel's depth is approximately $\frac{2}{3}$ to $\frac{3}{4}$ the height of the standing-area.
- 10 9. A shower-cabinet as claimed in any of claims 1 to 8, wherein the height of the outer edge the draining-channel is approximately $\frac{2}{3}$ to $\frac{3}{4}$ the height of the standing-area.
10. A shower-cabinet as claimed in any of claims 1 to 9, wherein the shower-plate is designed as a prefabricated component.

